

NORTH AIRPORT ENTRY UNDERPASS

George Washington Memorial Parkway, at National Airport

Arlington Vicinity

Arlington County

Virginia

HAER No. VA-82

HAER

VA

7-ARLV,

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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

National Park Service

Department of the Interior

P.O. Box 37127

Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING SURVEY

NORTH AIRPORT ENTRY UNDERPASS

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I. INTRODUCTION

Location: George Washington Memorial Parkway (GWMP) milepost 2.94, 1.1 miles from Interstate 395; carries GWMP over North Entrance to National Airport, Arlington County, Virginia.

FHWA Structure No.: 3300-021P.

Date of Construction: 1941.

Type: Steel plate girder bridge.

Designer: Bureau of Public Roads with approval from the National Park Service.

Present Owner: National Capital Region, National Park Service.

Present Use: Entry to National Airport.

Significance: Built as part of the first major changes in alignment to the GWMP.

Project Information: Documentation of the George Washington Memorial Parkway and Clara Barton Parkway was undertaken as a multi-year project by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER), a combined division of the National Park Service, Robert Kapsch, Chief. The project was sponsored by the Park Roads Program of the National Park Service, John Gingles, Deputy Chief, Engineering and Safety Services Division. The Project Supervisor was Sara Amy Leach, HABS Historian. Bridge reports were prepared by Elizabeth M. Nolin (1988); Michael P. Kucher (University of Delaware, 1993); and Jennifer P. Wentzien (University of Washington, 1994).

HABS Report No. VA-69 prepared by Timothy Davis (University of Texas) provides an overview history of the entire parkway project. Jack E. Boucher and Jet Lowe produced the large-format photographs. The Washington-based summer 1994 documentation team was headed by landscape architect Tim Mackey (Harvard University, Graduate School of Design).

II. HISTORY

The North Airport Entry Underpass occurs along the segment of the parkway known as the Mount Vernon Memorial Highway (MVMH). This bridge was built as part of the first major changes in the alignment of the George Washington Memorial Parkway (GWMP). The changes occurred in 1939 in connection with the expansion of Gravelly Point Airport, now known as Washington National Airport.

Description

The North Entry Airport Underpass has a total length of 59', with a single span of 56'. The deck is 92.8' wide, and is skewed 45° to the road. There is one 9' wide sidewalk along the east side. The substructure is comprised of 16" diameter precast concrete pilings supporting a continuous reinforced concrete footing of the counterfort type (stepped). Abutments are reinforced concrete with dimensioned masonry facing on the east and west returns. Inside walls are exposed concrete. Wing walls are reinforced concrete with a stone facing cast-in-place. The stone facing served the dual purposes of formwork and facing for the concrete. The wing walls are battered at 1:12 on their outside faces. The span is a conventional steel plate girder system, a type typically used for short-span railroad bridges in the United States¹. The bottom flange of the girders are curved upward as at the earlier R.F. and P. Railroad Underpass, an earlier GWMP structure (HAER Report No. VA-90)².

III. SOURCES

Condon, Carl. W. The American Building Art: The Twentieth Century. Oxford University Press, 1961.

U.S. Department of Agriculture, Bureau of Public Roads. Plans for Proposed Project 5B4. On microfiche at the National Capital Region Park Headquarters, Washington D.C.

This bridge is referred to as the Bridge over North Access to Airport in contract documents.

U.S. Department of the Interior, Historic American Buildings Survey (HABS), No. VA-69, "George Washington Memorial Parkway," 1994. Prints and Photographs Division, Library of Congress, Washington D.C.

U.S. Department of the Interior, National Park Service. "Structure Inventory and Appraisal Sheet - Structure No. 3300-021P." 4/21/93.

¹Condon, American Building Art: The Twentieth Century, 1961, p.99.

²Technical information taken from Plans for Proposed Project 5B4, Sheet 4 of 30 and "Structure Inventory and Appraisal Sheet No. 3300-021P."